

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 12-25 and 29-31 are presently active in this case. The present Amendment amends Claims 12-13, 15-16, 18, 20-21, 24-25; cancels Claims 26-28 and adds Claims 29-31.

The final Office Action objected to Claim 12 because of informalities. Claims 12-28 were rejected under 35 U.S.C. § 103(a) as unpatentable over Larsson et al. (U.S. Patent Publication No. 2004/0133289) in view of Nerwin v. Erlichman, 168 USPQ 177, 179.

In response to the objection to Claim 12, Claim 12 is amended to correct the noted informalities.

In response to the rejection under 35 U.S.C. § 103(a) from the final Office Action, and to the Advisory Action of November 20, 2008, which stated that the claimed values were too broadly defined, independent Claims 12 and 21 are amended to further specify the claimed values. Specifically, Claims 12 and 21 now require mapping the functions of the functional architecture onto a ***hardware architecture composed of hardware components***, and further define the values of the *first* list as being based on raw data measured with one of the sensors and corresponding to functional faults of the sensors and actuators; while the values of the *second* list correspond to functional states ***for the hardware components*** of the hardware architecture relative to a propagation of signals through the hardware architecture thereby indicating a state of propagation of information relating to the functional faults of the sensors and actuators across the functional architecture. The Advisory Action also stated that there is no mention in the claims of actual measurements, only creating lists and comparing the lists. In response, Claims 12 and 21 are amended to require a step of measuring a property of the physical object in which the service is performed with at least one of the

sensors so as to obtain the raw data used in creating the first list. These changes to the claims find support in the disclosure as originally filed, for example from page 8, line 27 to 10, line 3 and Fig. 2. New dependent Claims 29-31 focus on the embodiment relative to the wheel speed of a vehicle discussed in this passage. Thus, the changes to the claims are not believed to raise a question of new matter.

In view of the present Amendment, Applicant respectfully requests reconsideration of the final rejection. The Larson et al. publication discloses a method for diagnosing a flow system. The Larson et al. publication, however, fails to disclose Applicant's claimed method, as defined in amended Claims 12 and 21. In particular, the Larson et al. publication fails to disclose the claimed step of formulating a functional diagnosis of a service *based on the first and second lists* of particular values, where the particular values of the *first* list are based on *raw data measured by a sensor* and correspond to functional faults of the sensors and actuators; and where the particular values of the *second* list correspond to functional states for *hardware components of a hardware architecture on which is mapped a functional architecture associated with the sensor*, the functional states of the hardware components being relative to the propagation of signals through the hardware architecture thereby indicating a state of propagation of information relating to the functional faults of the sensors and actuators across the functional architecture.

In rejecting Claim 12, the final Office Action pointed to paragraphs [0009], [0017], [0175], and [0184] for meeting the claimed steps of creating the first and second lists of values and of formulating a diagnosis based on these values. Applicant respectfully submits, however, that these paragraphs do not disclose the claimed features now required by amended Claims 12 and 21.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in

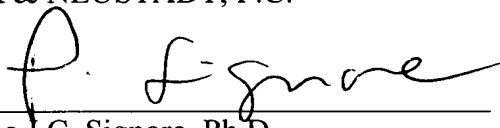
Application No. 10/539,128  
Reply to Office Action of June 25, 2008 and  
Advisory Action of November 20, 2008

condition for formal Allowance. A Notice of Allowance for Claims 12-25 and 29-31 is  
earnestly solicited.

Should the Examiner deem that any further action is necessary to place this  
application in even better form for allowance, the Examiner is encouraged to contact  
Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

A handwritten signature in black ink, appearing to read "P. J. Signore", written over a horizontal line.

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